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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/054,864 | 04/03/1998 | CRAIG R. FRINK | AO521/7145(P | 3189 |
| 26643 | 7590 | 12/05/2003 | EXAMINER | |
| PETER J. GORDON, PATENT COUNSEL AVID TECHNOLOGY, INC. ONE PARK WEST TEWKSBURY, MA 01876 | | | TRAN, HAI V | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2611 | |
| DATE MAILED: 12/05/2003 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-----------------|--------------|---|
| Office Action Summary | Application No. | Applicant(s) | / |
| | 09/054,864 | FRINK ET AL. | |
| | Examiner | Art Unit | |
| | Hai Tran | 2611 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-48 is/are pending in the application.
 - 4a) Of the above claim(s) 1-4 and 6-18 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 5, 21-24, 27-30, 33-36, 39-44 is/are rejected.
- 7) Claim(s) 19-20, 25-26, 31-32, 37-38 and 45-48 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>13</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 5-8 and 17-18 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

Claims 19-20, 25-26, 31-32, 37-38 and 45-48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 5, 21, 23, 27, 29, 30, 33, 35, 39 and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamilton et al. (US 5799150) in view of Casey et al. (US 6097499).

Regarding apparatus claims 5, 24, 42 and 43, Hamilton discloses a host device (Server) for transferring data to a video-processing device (Client) over a high speed network (between server and Client) (Fig. 2), comprising:

A memory 56;

An input 60 for receiving request packets from the video processing device (Client) over the over a high speed network (between server and Client), wherein each request packet indicated a request from the video processing device (Client) to transfer video data (Col. 9, lines 23-38); and wherein each request packets includes a stream identifier; and

An output for sending 60, in response to a request packet, a plurality of data packets including video data for the requested data from the memory to the video processing device (Client) over the network (Col. 9, lines 48-56). high speed serial bus, wherein each data packet includes the stream identifier.

Hamilton does not clearly disclose the video data is transmitted over a high speed serial bus, i.e. IEEE-1394, using frame by frame flow control. However, Hamilton suggests that other network interfaces could be used beside his teaching (Col. 5, lines 14-25).

Casey teaches the use isochronous communication channel (IEEE-1394) for transmitting data using frame by frame flow control (constant delivery rate within a time period; Col. 10, lines 40-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hamilton 's network communication interface and protocol to an high speed serial bus with its isochronous protocol, as taught by Casey, so to take the advantage of the IEEE-1394 standard network and communication protocol such as to ensure that rate matching between the sender and receiver can be accomplished with ease.

As to "wherein each request packets includes a stream identifier", it is met by Hamilton in view of Casey because a structural of a CIP header in IEEE-1394 packet comprises a stream Identifier (SID) which is the ID of the data transmission apparatus, i.e., Hamilton Server or Casey's Host.

Regarding claims 21 and 27, "wherein at least one of the data packets in the plurality of data packets includes a target field indicating a device to which the video processing device is directed to transfer the video data" is further met by Hamilton in view of Casey since IEEE-1394 packet further comprises "destination ID" which corresponds to "a target field indicating a device to which the video processing device is directed to transfer the video data" claimed.

Regarding claim 23, and 29 Hamilton in view of Casey further discloses, "wherein the host device further sends, through the output, a data packet including a command field indicating a command to the video processing" (see Fig. 7, command channel; Col. 7, lines 63-66).

Regarding claim 44, "wherein the request packets includes a packet rate field that specifies a packet rate at which the host device is to send data to the video processing" is further met by Hamilton in view of Casey (Hamilton; Col. 9, lines 25-38 and Casey's feed back message (Col. 9, lines 30-65 and Col. 10, lines 45-60) to indicate an amount of data need to be adjusted for transmission in isochronous

communication in which IEEE-1394 packet must has a packet rate field in order to perform as disclosed).

Regarding method claims 30 and 36 are analyzed with respect to apparatus claim 5.

Regarding method claims 33 and 39 (target field) are analyzed with respect to apparatus claim 21

Regarding method claims 35 and 41 (command field) are analyzed with respect to apparatus claim 23

2. Claims 22, 28, 34 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamilton et al. (US 5799150) in view of Casey et al. (US 6097499) and further in view of Washington et al. (US 5920572).

Regarding claims 22 and 28, Hamilton in view of Casey does not disclose "wherein a data packet in the plurality of data packets includes a boundary signal indicating whether the data packets includes a last component of the video data of the requested frame." However, Hamilton discloses that the network interface maintains a set of state information for each active transmit/receive channel regarding the amount of data that a transmitter/receiver could be transmitted/received (Col. 8, lines 5-43).

Washington discloses a boundary signal portion including a boundary signal indicating that the data packet ends with a last component of the read data (Col. 10,

lines 51-Col. 11, lines 20 and Col. 12, lines 57-65+). Washington further discloses that the boundaries of each packet need not begin (could be located anywhere on the packet) on a transport packet boundary. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hamilton in view of Casey by including a boundary signal to indicate that the data packet ends with a last component of the read data (boundaries of each packet), as taught by Washington, so Hamilton's system able to detect the synchronization status of the transport packets with the transport stream by identifying the boundaries of each packet, as disclosed (Col. 11, lines 1-20).

Regarding method claims 34 and 40 are analyzed with respect to apparatus claim 22.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Tran whose telephone number is 703-308-7372. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Omura et al (US 6430620) shows a system and method for locating and transferring lost data through the use of position number within a file.

Takeda et al. (US 6101215) shows a data transmission apparatus, data reception apparatus and medium.

Takeda et al. (US 6577646) shows a data transmission apparatus, data receiving apparatus and data transmission control apparatus.

White (US 6041286) shows an apparatus for and method of accurately obtaining the cycle time of completion of transmission of video frames within an isochronous stream of data transmitted over an IEEE 1394 serial bus network.

HT:ht
11/29/03


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